

Serial No.: 10/708,293
Art Unit: 3754
Examiner John C. Fox
June 6, 2005
Page 2 of 5

IN THE CLAIMS:

1-20. (Cancelled).

21. (Previously Presented) A seat ring for a ball valve comprising:
a first end and a second end;
the first end having a sealing surface configured to receive a portion of a ball member;
the second end having an annular flange with a cut out portion and a contact surface,
wherein said annular flange is received in a groove in a ball valve body;
wherein when an axial force is applied to said annular flange, a seal is created between the ball valve body and the contact surface and the first end is moveable in a cantilever motion such that a portion of the ball member contacts a portion of the sealing surface when the ball member is axially displaced.

22. (Previously Presented) The seat ring of claim 21, wherein said seat ring is comprised of thermoplastic material.

23. (Previously Presented) The seat ring of claim 22, wherein said thermoplastic material is polyetheretherketone.

24. (Previously Presented) A seat ring for a ball valve comprising:
a first end, and a middle portion and a second end;
the first end having a sealing surface configured to receive a portion of a ball member;
the middle portion having an engaging surface, wherein when an axial force is

Serial No.: 10/708,293
Art Unit: 3754
Examiner John C. Fox
June 6, 2005
Page 3 of 5

applied to the engaging surface, a seal is created between the ball member and the sealing surface;

the second end having an annular flange with a contact surface wherein said annular flange is received in a groove in a ball valve body;

wherein when an axial force is applied to said annular flange, a seal is created between the ball valve body and the contact surface and the first end is moveable in a cantilever motion when the ball member is axially displaced,

wherein the sealing surface is angled such that when the ball member moves axially and the first end moves in a cantilever motion, a portion of the ball member contacts a portion of the sealing surface.

25. (Previously Presented) The seat ring of claim 24, wherein said seat ring is comprised of thermoplastic material.

26. (Previously Presented) The seat ring of claim 25, wherein said thermoplastic material is polyetheretherketone.

27. (Previously Presented) A seat ring for a ball valve comprising:

a first end and a second end;

the first end having a sealing surface configured to receive a portion of a ball member;

the second end having an annular flange with a cut out portion and a contact surface wherein said annular flange is received in a groove in a ball valve body, wherein said contact surface is angled such that only a corner of the contact surface contacts the groove and when an axially force is applied to said annular flange, a seal is created between the annular flange and the ball valve body at the corner of the contact surface and the first end is moveable in a cantilever motion when the ball member is

Serial No.: 10/708,293
Art Unit: 3754
Examiner John C. Fox
June 6, 2005
Page 4 of 5

axially displaced such that a portion of the ball member contacts a portion of the sealing surface.

28. (Previously Presented) The seat ring of claim 27, wherein said seat ring is comprised of thermoplastic material.

29. (Previously Presented) The seat ring of claim 28, wherein said thermoplastic material is polyetheretherketone.

30 - 31. (Cancelled)